



PERFORMANCE MONITORING FOR COMPASS AND FOR CBNRM IN MALAWI

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Community
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Performance Monitoring for COMPASS and for CBNRM in Malawi

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INTRODUCTION

Malawi's environmental degradation is widely recognized. Forests are being rapidly cut down for fuelwood and agricultural expansion. Unsustainable agriculture is exposing the country's old and fragile soils to the forces of erosion. While Malawi has commendably set aside a sizable percentage of its land for protection, the battle against poaching of endangered species such as the elephant is far from over. Overfishing of near-shore stocks in Lake Malawi are making once staples of the Malawian diet, such as the chambo, increasingly scarce. Although these problems are well recognized, reliable data on the exact dimensions of these problems are hard to find and more often non-existent.

It is generally recognized that these downward environmental trends are undermining Malawi's ability to pursue its sustainable development goals. In response, the Government of Malawi (GOM) has recently adopted community-based natural resources management (CBNRM) as the basic approach to manage the environment. CBNRM is intended to give local communities a direct stake in, and authority over, management of their natural resources. Institutional and legal systems are currently being set up to decentralize environmental management, from a highly centralized management regime to one that entrusts district governments and traditional authorities to determine how their resources should be managed. Beginning in 1996, the GOM passed new laws in forestry, fisheries, parks and wildlife, water, and environmental protection. The Local Government Act, which devolves power from the national government to local authorities, is a significant step toward greater decentralization. In addition, legislation to reform land tenure is currently under examination.

Donors, such as Danida, GTZ, UNDP, and USAID, as well as dozens of international and domestic NGOs, are also helping to turn the tide against the environmental degradation. USAID has launched COMPASS in an effort to work with the national and district governments, NGOs, and individual communities to introduce and consolidate participatory approaches and national policies that advance CBNRM. How well COMPASS, USAID, the people of Malawi, and other donors are able to reverse the environmental decline will have profound impacts for Malawi's well being for many years to come.

As part of efforts to institutionalize CBNRM, the government of Malawi and partners are increasingly recognizing the importance of performance monitoring as an indispensable tool for helping the country out of its environmental predicament. Effective performance monitoring will permit policy makers and resource users to identify problems in implementing CBNRM policies and programs promptly to make necessary mid-course corrections. A rigorous, yet practical and participatory system for performance monitoring provides the underpinning for adaptive management, which aims to maximize the chances that CBNRM will be successfully adopted.

This report aims to help lay the foundation for a performance monitoring system that will assist COMPASS, the government of Malawi, resource users, and donors to advance CBNRM. In accordance with the scope of work, the report discusses two monitoring systems. Section I presents a refined performance monitoring system for USAID's COMPASS activity. The section builds on previous draft monitoring plans and presents a refined result framework, updated list of indicators, definitions, and targets that reflect

experience gained by activity staff in 1999. Section II is more theoretical. It presents one possible approach that the Government of Malawi and its partners may consider in developing a nationwide performance monitoring system for CBNRM. The section presents an illustrative result framework and indicators as a potential starting point for constructing a monitoring plan. It is hoped that this section will spark discussion and action to improve current environmental monitoring in an effort to advance CBNRM and environmentally sustainable development in Malawi.

SECTION I

REFINING THE COMPASS PERFORMANCE MONITORING PLAN

USAID/Malawi launched COMPASS in April 1999 in support of the Government of Malawi's new policy to promote community-based natural resource management. Since its inception, COMPASS has worked across five targeted results to increase the adoption of CBNRM practices. During this time, staff has gained greater understanding of CBNRM processes in Malawi, and how COMPASS can help to build capacity at the local, district, and national levels to facilitate these processes.

Performance monitoring is an integral part of COMPASS and its adaptive management approach. COMPASS documents underscore the essential role of a performance-based approach for promoting CBNRM. Performance monitoring allows staff to build on winning initiatives and to take corrective action when results are less successful than anticipated. The COMPASS monitoring plan has therefore been developed to help staff gauge the status and success of achieving expected activity outputs and impacts for the dual purpose of program management and reporting to USAID and partners. As COMPASS completes its first eight months of implementation, the activity team and USAID believed it was an opportune time to revisit the illustrative performance monitoring plan (PMP), as drafted in earlier activity documents, and where necessary, make appropriate adjustments and refinements. Early "illustrative" indicators were first developed during proposal preparation for COMPASS based on the best available information at that time. To finalize these indicators and ensure that they respond to the needs of staff, USAID, and local partners, as well as reflect the experience gained by COMPASS, each indicator has been scrutinized and where required refined. Thus, "refined" indicators presented in this report are intended to ensure that COMPASS can successfully pursue the adaptive management approach articulated in the activity's design documents. These modifications are made with the understanding that performance monitoring is a dynamic process. Indicators need to be periodically assessed and refined to ensure that monitoring continues to evolve and meet new information needs of program managers, partners, and resource users.

1.1 Approach for Refining the COMPASS Performance Monitoring Plan

Refining the COMPASS PMP involved several steps. Initially, the illustrative monitoring plan, its indicators and targets were assessed to determine how well they conform to standard performance monitoring practice and guidance for USAID activities. The observations and findings were discussed with project staff. In general, the assessment found that there was a good mix of indicators measuring results, processes, and outputs useful for project management. Several indicators and targets, however, appeared to be either outside the manageable interest of COMPASS or to be indirect measures of the results being pursued. Based on these findings, staff developed new indicators and targets in several cases.

The refined PMP presented in the following pages is intended to address issues uncovered by the assessment by including indicators that are direct measures of COMPASS results and that have a plausible attribution between COMPASS activities and the result being pursued. The

monitoring plan also reflects the evolving needs of program managers who are interested in closely gauging the progress of their activities. The PMP considers those results that COMPASS achieves in close collaboration with its local partners, ranging from national-level non-governmental organizations (NGOs) and the government, to individual community-based organizations (CBOs) and trainees. This means that some results, such as the establishment of new environmental policies, institutions, or procedures within the Government of Malawi, are not within the total control of COMPASS or USAID. In these cases, COMPASS acts as a facilitator working in collaboration with its partners to achieve the desired result. Nevertheless, measuring the performance and impact of results achieved in close collaboration with partners is critical for good project management.

1.2 COMPASS Results Framework

To ensure that the PMP accurately measures performance in achieving the principal results pursued by COMPASS, a result framework (figure 1) was drafted to guide the refinement of indicators. The result framework presents the causal linkages between COMPASS activities and results and USAID's strategic environmental objective. At the base of the framework are the five principal targeted results (TR) pursued by COMPASS. These TRs are designed to create a favorable enabling environment for CBNRM in Malawi starting within a one-to-three year period. Individual TRs are oriented toward creating effective CBNRM institutional capacity within the government, facilitating information exchange and awareness building, increasing community mobilization skills for CBNRM, strengthening essential policy processes, and launching a small grants program. For each TR, COMPASS supports a series of lower-level "sub-results" (SRs) that are critical for their achievement.

The achievement of COMPASS TRs, in collaboration with other targeted results pursued by partners in Malawi (see dotted box), should result in the increased adoption of CBNRM practices within five years, which is COMPASS's highest level objective. As the framework shows, the COMPASS objective feeds directly into USAID's strategic objective to increase the sustainable use of natural resources. In order for this hierarchy of results to be achieved, several critical assumptions should be met, including a stable economy and climate, and continued government and donor support for CBNRM.

Below is a brief description of each TR:

TR 1: Effective CBNRM Administration and Technical Services Capacity Established

This TR seeks to help establish three key bodies to achieve this result: a national-level CBNRM coordinating group, a CBNRM secretariat, and the COMPASS partners association. The coordinating group and secretariat are intended to facilitate a national CBNRM strategic planning process to provide a framework for ensuring that CBNRM initiatives in Malawi are designed and implemented rationally and that a national CBNRM monitoring system is instituted to assess the impacts of these initiatives. The COMPASS partners association is designed as an informal body that facilitates collaboration among CBNRM initiatives within Malawi and the region and to promote best practices in CBNRM and efficient use of project resources.

TR2: Efficient Liaison, Communication and Information Exchange Mechanisms among CBNRM Programs Established

COMPASS fosters both formal and informal methods for communication and information exchange among CBNRM programs. This TR supports a computer-based information network to improve the quantity and quality of communications among CBNRM promoters and practitioners in Malawi and elsewhere, as well as public awareness campaigns targeting rural communities through radio, print media, television, and other appropriate outreach mechanisms. COMPASS also supports workshops and conferences designed to strengthen linkages, disseminate best practices, and encourage participation in strategic planning processes.

TR3: Community Mobilization Skills within Government, NGOs and Community Groups Improved

TR3 activities are dedicated toward building a positive attitude toward environmental protection within communities and promoting their own vision of sustainable resource utilization and biodiversity conservation. Broad areas of support fall into three areas:

- Basic skills in training, extension, and community mobilization;
- Technical skills building in natural resources management; and
- Business skills for sustainable natural resource-based enterprises.

TR4: Process of Policy and Legislative Reform in Favor of CBNRM Supported

This TR responds to traditional policy formulation approaches in Malawi which have tended to be top-down, developed in isolation within a specific sector, and difficult to implement. In response, COMPASS works to strengthen the capacity of intermediary organizations, such as NGOs and other advocacy groups, to ensure that local perspectives are incorporated into policy formulation and implementation. This TR requires close collaboration with the Environmental Affairs Department in efforts to work with stakeholders and other partners to develop principles for formulating CBNRM policies and to guide the implementation of natural resource management activities.

TR5: CBNRM Small Grant Management Services to Finance Special CBNRM Opportunities Established

This TR supports a small grants program that cuts across all other TRs. NGOs and community-based organizations are intended to be the main grant recipients in support of a wide variety of community development and/or natural resources management activities, including forest management, wildlife conservation, soil management, sustainable agriculture, etc.

1.3 Refining COMPASS Indicators

With the result framework established as the guiding document for indicator selection, staff

developed a generic set of criteria commonly used by USAID to develop indicators:

- Indicators should be *direct measures* of the result being pursued.
- Indicators should be *objective*, able to be defined in precise and objective terms so that they can be understood by a wide audience and not open to varying interpretation.
- Indicators should reflect the manageable interest of the activity, with a *plausible attribution* made between the activity and result sought.
- Indicators should be *practical* to allow the cost-effective collection of data on a timely basis.
- Indicators should be *disaggregated* by gender whenever appropriate to better manage for results.
- Indicators should be *quantitative* whenever possible, although qualitative indicators are also acceptable depending on the result being measured.

Table 1 presents the refined PMP for COMPASS, including the modified list of indicators, targets, and detailed information on data collection. The refined PMP was developed in close collaboration with technical staff, in consultation with USAID and several partner organizations. One new feature of note is an annual survey that will be designed to provide feedback on how COMPASS is meeting the expectations and needs of its “customers”. The survey will cover several indicators, and help staff to determine general levels of satisfaction in such areas as information dissemination and coordination.

With a more definitive PMP now in hand, several steps are still required to fully operationalize the monitoring plan.

1. Several indicators still require baseline data to be gathered and target to be determined.
2. Several indicators require that those partners who will be responsible for submitting data to the PMP be notified of their role and contributions to the monitoring plan, and are given appropriate technical assistance to ensure their collaboration.
3. The COMPASS TAMIS will need to be updated to reflect the refined PMP. This may include the need to develop forms for indicators to ensure that monitoring is conducted continuously by COMPASS staff and partners. In addition, a questionnaire will need to be prepared and a list of participants compiled for the customer survey.

Ultimately, the real test for the PMP will occur when actual data for FY2000 is gathered and analyzed for program management and reporting. The COMPASS team should keep in mind that the PMP is still a work in progress. Indicator definitions may need to be refined, or targets may need to be adjusted based on new experience. Maintaining a strategic vision and direction of CBNRM activities, while also permitting flexibility to adjust the PMP to reflect evolving partner needs and program developments, are challenges within any monitoring plan.

Figure 1.
COMPASS Results Framework

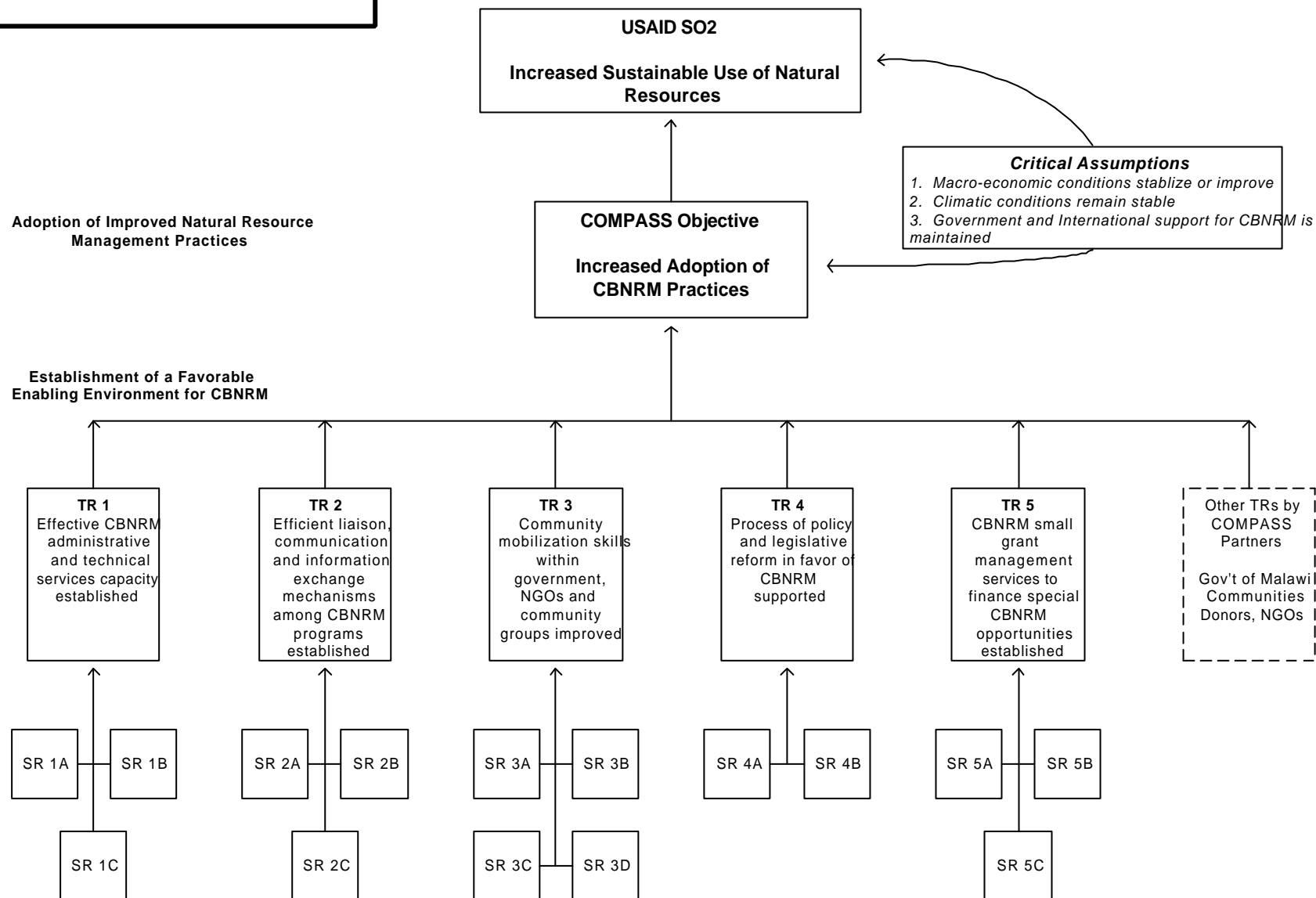


Table 1. COMPASS Refined Performance Monitoring Plan

Activity Objective: Increased Adoption of CBNRM Practices		
	Overall Impact	Overall Impact
Indicator	Number of communities adopting CBNRM practices as a result of COMPASS activities	Percentage of customary land under improved natural resource management in COMPASS target Districts
Indicator Definition	CBNRM practices may include adoption and/or implementation of a CBNRM action plan, best practice in forest management, wildlife conservation, soil management, sustainable agriculture, etc.	Proportion of customary land upon which community-based management of natural resources is practiced relative to the total area of customary land in the District(s).
Unit of Measurement	Number of communities	Percent
Data Source	District authorities/EAD/COMPASS grantees	District authorities/EAD/COMPASS sub-grantees
Method of Data Collection	Review of records, survey	Review of records, survey
Frequency	Annually	Annually
Reporting	Annually	Annually
End-users	USAID and other donors, CBNRM coordinating body	USAID and other donors, CBNRM coordinating body

COMPASS RESULT	Overall Impact	Overall Impact
Increased Adoption of CBNRM Practices	Number of communities adopting CBNRM practices as a result of COMPASS activities	Percentage of customary land under improved natural resource management in COMPASS target Districts
Target*	200	40%
Baseline Data	0	<3%
FY2000 Target	20	5%
FY2000 Actual		
FY2001 Target	50	10%
FY2001 Actual		
FY2002 Target	90	20%
FY2002 Actual		
FY2003 Target	140	30%
FY2003 Actual		
FY2004 Target	200	40%
FY2004 Actual		

* Targets for the entire PMP are cumulative unless noted otherwise.

TARGETED RESULT 1: Effective CBNRM administrative and technical services capacity established				
	Overall Impact	Sub-Result 1A: CBNRM coordinating body and Secretariat created	Sub-Result 1B: Relationships among CBNRM Programs established	Sub-Result 1C: National CBNRM strategic planning process developed
Indicator	Number of Districts with CBNRM action plans incorporated into the District Environmental Action Plans	Production of annual assessment of CBNRM	Number of active members in COMPASS Partnership Association	Establishment of national CBNRM strategic planning process
Indicator Definition	Number of administrative Districts that have incorporated specific CBNRM approaches for achieving objectives within their Environmental Action Plan	Production and dissemination of an annual CBNRM assessment by the CBNRM Working Group	Active members are defined by organizations that participate in at least one of the following: <ul style="list-style-type: none"> COMPASS meetings and workshops, training courses, posting notices on COMPASS listserve, publishing lessons learned. 	Progress as defined by achievement of the following criteria: <ul style="list-style-type: none"> CBNRM monitoring procedures developed and implemented. Guidance on pursuing equitable geographical and socio-economic scope for CBNRM practices designed. Inter-sectoral collaboration achieved. Effective stakeholder input.
Unit of Measurement	Number of Districts	Production of annual CBNRM assessment	Number of organizations	Percent of criteria achieved
Data Source	District authorities/EAD	CBNRM Working Group	COMPASS	CBNRM Working Group
Method of Data Collection	Review of Action Plans	Review of records	Review of records	Audit
Frequency	Annually	Annually	Annually	Annually
Reporting	Annually	Annually	Annually	Annually
End-users	USAID and other donors, CBNRM coordinating body	USAID and other donors, CBNRM coordinating body	USAID, CBNRM coordinating body	USAID and other donors, CBNRM coordinating body

TARGETED RESULT	Overall Impact	Sub-Result 1A: CBNRM coordinating body and Secretariat created	Sub-Result 1B: Relationships among CBNRM Programs established	Sub-Result 1C: National CBNRM strategic planning process developed
TR 1: Effective administrative and technical services capacity established	Number of Districts with CBNRM components incorporated into the District Environmental Action Plans	Annual assessment of CBNRM produced.	Number of active members in COMPASS Partnership Association	Establishment of strategic planning
Target	27	Production of annual CBNRM assessment	100	100% of criteria
Baseline Data	0	0	0	0
FY2000 Target	9	Production of annual CBNRM assessment	40	100% of criteria
FY2000 Actual				
FY2001 Target	15	Production of annual CBNRM assessment	60	100% of criteria
FY2001 Actual				
FY2002 Target	21	Production of annual CBNRM assessment	80	100% of criteria
FY2002 Actual				
FY2003 Target	27	Production of annual CBNRM assessment	100	100% of criteria
FY2003 Actual				
FY2004 Target	27	Production of annual CBNRM assessment	100	100% of criteria
FY2004 Actual				

TARGETED RESULT 2: Efficient liaison, communication and information exchange mechanisms among CBNRM Programs established				
	Overall Impact	Sub-Result 2A: CBNRM Computer information network expanded	Sub-Result 2B: Public awareness campaign launched	Sub-Result 2C: Relationship among CBNRM programs strengthened
Performance Indicator	<ol style="list-style-type: none"> 1. Percent of CBNRM service providers and practitioners that rate COMPASS information exchange and liaison as good to excellent. 2. Percent of CBNRM service providers and practitioners which can name CBNRM best practices and approaches 	Number of "hits" on COMPASS website	<ol style="list-style-type: none"> 1. Number of articles on CBNRM appearing in key newspapers . 2. Number of radio and television programs on the environment. 3. Number of schools reached through COMPASS environmental education materials. 	<ol style="list-style-type: none"> 1. Number of participants at annual CBNRM conference. 2. Number of users of COMPASS library
Indicator Definition	<ol style="list-style-type: none"> 1. Service providers to include NGOs, CBOs, and government. 2. Best practices to include forest management, wildlife, water conservation, fisheries, and soil management. 	Continuous count of the number of times an internet user enters the COMPASS website	<ol style="list-style-type: none"> 1. The Daily Times, Nation, Malawi News, and Saturday Nation. 2. Malawi Broadcasting Corp., and Television Malawi 	<ol style="list-style-type: none"> 1. Number of participants at annual CBNRM conference, disaggregated by gender. 2. Number of users per month
Unit of Measurement	Percent	Number	Number	Number
Data Source	COMPASS	COMPASS	COMPASS and Partners	COMPASS and CBNRM Secretariat
Method/Approach of Data Collection	Survey	Review of records	Audit	<ol style="list-style-type: none"> 1. Conference proceedings. 2. User logs for library
Schedule/Frequency	Annually	Monthly	Monthly	<ol style="list-style-type: none"> 1. Annually 2. Monthly
Reporting	Annually	Quarterly	Quarterly	<ol style="list-style-type: none"> 1. Annually 2. Quarterly
End-users	USAID and other donors, CBNRM coordinating body, COMPASS partners	USAID	USAID and other donors, CBNRM coordinating body, COMPASS partners	USAID

TARGETED RESULT	Overall Impact	Sub-Result 2A: CBNRM computer information network expanded	Sub-Result 2B: Public awareness campaign launched	Sub-Result 2C: Relationship among CBNRM programs strengthened
TR 2: Efficient liaison, communication and information exchange mechanisms among CBNRM Programs established	1. Percent of CBNRM service providers and practitioners that rate COMPASS information exchange and liaison as good to excellent. 2. Percent of CBNRM service providers and practitioners that can name CBNRM best practices and approaches for forest management, wildlife, water conservation, fisheries, and soil management.	Number of "hits" on COMPASS website	1. Number of articles on CBNRM appearing in key newspapers and magazines. 2. Number of radio and television programs on the environment. 3. Number of schools reached through COMPASS environmental education materials.	1. Number of participants at Annual CBNRM Conference. 2. Number of users of COMPASS library per month
Target	1. 90% 2. To be determined	60 hits/month	1. 9 news articles/week 2. Radio & TV – to be determined 3. To be determined	1. 120 participants 2. 15 users/month
Baseline Data	1. 0 2. To be determined	0	1. <.5 news articles/week, 2. To be determined 3. To be determined	1. 0 2. 0
FY2000 Target	1. 50% 2. To be determined	20 hits/month	1. 2 news articles/week, 2. To be determined 3. To be determined	1. 40 participants 2. 0 users
FY2000 Actual				
FY2001 Target	1. 60% 2. To be determined	30 hits/month	1. 4 news articles/week, 2. To be determined 3. To be determined	1. 60 participants 2. 5 users/month
FY2001 Actual				
FY2002 Target	1. 70% 2. To be determined	40 hits/month	1. 6 news articles/week, 2. To be determined 3. To be determined	1. 80 participants 2. 8 users/month

FY2002 Actual				
FY2003 Target	1. 80% 2. To be determined	50 hits/month	1. 8 news articles/week, 2. To be determined 3. To be determined	1. 100 participants 2. 12 users/month
FY2003 Actual				
FY2004 Target	1. 90% 2. To be determined	60 hits/month	1. 9 news articles/week, 2. To be determined 3. To be determined	1. 120 participants 2. 15 users/month
FY2004 Actual				

TARGETED RESULT 3: Community mobilization skills within government, NGOs and community groups improved					
	Overall Impact	Sub-Result 3A: CBNRM training program designed for all interested parties	Sub-Result 3B: Training delivered	Sub-Result 3C: CBNRM best-practices identified	Sub-Result 3D: National and regional CBNRM exchange program developed
Performance Indicator	COMPASS collaborators, (particularly NGOs, CBOs, and government) demonstrating improved community mobilization skills through COMPASS support	Number of co-sponsored training programs.	1. Number of COMPASS trainees 2. Level of satisfaction of COMPASS training.	Number of best practices identified in key CBNRM sectors.	1. Number of participants in exchange programs. 2. Level of satisfaction of COMPASS exchange program. 3. Result from exchange program.
Indicator Definition	Improvements to include the following: <ul style="list-style-type: none"> • Basic skills in training, extension, community mobilization; • Technical skills in natural resources management; • Business skills for natural resource enterprises. 	Number of CBNRM training programs that have attracted funding from more than one source or have promoted cost sharing. Cost sharing may include co-financial of training with other donors or the government, or in-kind contributions from communities, NGOs, or government.	1. Number of individuals trained in CBNRM techniques directly through COMPASS programs, disaggregated by gender. 2. Percent of trainees who rate COMPASS training as useful for CBNRM in course evaluation.	Best practices to be developed in forest management, wildlife conservation, sustainable agriculture and soil erosion, water conservation, fisheries, etc.	1. Number of participants in exchange programs, disaggregated by gender 2. Percent of participants who rate exchange visits as useful for CBNRM in course evaluation 3. Percent of participants reporting adoption of new CBNRM practice as a result of exchange visit.
Unit of Measurement	Number	Number	1. Number 2. Percent	Number	1. Number 2. Percent 3. Percent
Data Source	COMPASS partners	COMPASS	COMPASS, NGOs	COMPASS, CBNRM Secretariat	COMPASS
Method/Approach of Data Collection	Assessment	Review of reports	Review of reports, course evaluation	Review of records	Review of reports, course evaluation, surveys

Schedule/Frequency	Annually	Annually	Quarterly	Quarterly	Quarterly and annually
Reporting	Annually	Annually	Quarterly	Quarterly	Quarterly
End-users	USAID and other donors, CBNRM coordinating body, COMPASS partners	USAID	USAID, CBNRM coordinating body, COMPASS partners	USAID, CBNRM coordinating body, COMPASS partners	USAID, CBNRM coordinating body, COMPASS partners

TARGETED RESULT	Overall Impact	Sub-Result 3A: CBNRM training program designed for all interested parties	Sub-Result 3B: Training delivered	Sub-Result 3C: CBNRM best-practices identified	Sub-Result 3D: National and regional CBNRM exchange program developed
TR 3: Community mobilization skills within government, NGOs and community groups improved	COMPASS collaborators, (particularly NGOs, CBOs, and government) demonstrating improved community mobilization skills through COMPASS support	Number of CBNRM training programs that have attracted funding from more than one source or have promoted cost-sharing	1. Number of individuals trained in CBNRM techniques directly through COMPASS programs, disaggregated by gender 2. Percent of trainees who rate COMPASS training as useful for CBNRM in course evaluation	Number of best practices identified in key CBNRM sectors.	1. Number of participants in exchange programs, disaggregated by gender 2. Percent of participants who rate exchange visits as useful for CBNRM in course evaluation 3. Percent of participants reporting adoption of new CBNRM practice as a result of exchange visit.
Target	To be determined	40	1. 600 (50% M, 50% F) 2. 80%	42 best practices	1. 300 (50% M, 50% F) 2. 80% 3. 25%
Baseline Data	To be determined	0	1. 0 2. 0	0	1. 0 2. 0% 3. 0%
FY2000 Target	To be determined	8	1. 120 (50% M, 50% F) 2. 80%	10 best practices	1. 30 (50% M, 50% F) 2. 80% 3. 25%
FY2000 Actual					
FY2001 Target	To be determined	18	1. 270 (50% M, 50% F) 2. 80%	20 best practices	1. 90 (50% M, 50% F) 2. 80% 3. 25%
FY2001 Actual					
FY2002 Target	To be determined	28	1. 420 (50% M, 50% F) 2. 80%	30 best practices	1. 180 (50% M, 50% F) 2. 80% 3. 25%
FY2002 Actual					

FY2003 Target	To be determined	38	1. 570 (50% M, 50% F) 2. 80%	40 best practices	1. 270 (50% M, 50% F) 2. 80% 3. 25%
FY2003 Actual					
FY2004 Target	To be determined	40	1. 600 (50% M, 50% F) 2. 80%	42 best practices	1. 300 (50% M, 50% F) 2. 80% 3. 25%
FY2004 Actual					

TARGETED RESULT 4: Process of policy and legislative reform in favor of CBNRM supported			
	Overall Impact	Sub-Result 4A Mechanisms for Participation in the Development of CBNRM Guiding Principles Created	Sub-Result 4B: Capacity to evaluate and revise existing policies strengthened
Performance Indicator	Effectiveness of Policy Reform Task Force	CBNRM policy reform agenda proposed to government by Policy Reform Task Force annually.	Number of NGOs able to effectively participate in the policy advocacy process.
Indicator Definition	Success rate for achieving key procedures and agenda items drafted by the Policy Reform Task Force for CBNRM policy reform	Policy Reform Task Force meets annually (during the CBNRM Conference), prepares a policy reform agenda, and presents it to representatives of the Government of Malawi	NGOs ability to participate in policy advocacy as defined by the following parameters: <ul style="list-style-type: none"> • research issues, • consult with constituency, • deliver cogent message to key decision makers, and • monitor follow-up.
Unit of Measurement	Percent	Production and presentation of annual policy agenda	Number of NGOs
Data Source	Policy Reform Task Force	Policy Reform Task Force	NGOs
Method/Approach of Data Collection	Review of records	Review of records	Audit
Schedule/Frequency	Annually	Annually	Annually
Reporting	Annually	Annually	Annually
End-users	USAID, CBNRM coordinating body, COMPASS partners	USAID, CBNRM coordinating body, COMPASS partners	USAID, CBNRM coordinating body, COMPASS partners

TARGETED RESULT	Overall Impact	Sub-Result 4A Mechanisms for Participation in the Development of CBNRM Guiding Principles Created	Sub-Result 4B: Capacity to evaluate and revise existing policies strengthened
TR 4: Process of policy and legislative reform in favor of CBNRM supported	Success rate for achieving major procedures and agenda items drafted by the Policy Reform Task Force	Policy Reform Task Force meets annually (during the CBNRM Conference), prepares a policy reform agenda, and presents it to representatives of the Government of Malawi	Number of NGOs able to effectively participate in the policy advocacy process: <ul style="list-style-type: none"> • research issues, • consult with constituency, • deliver cogent message to key decision makers, and • monitor follow-up.
Target	75%	Annual policy agenda produced	4
Baseline Data	0%	0	0
FY2000 Target	40%	Annual policy agenda produced	1
FY2000 Actual			
FY2001 Target	50%	Annual policy agenda produced	2
FY2001 Actual			
FY2002 Target	60%	Annual policy agenda produced	3
FY2002 Actual			
FY2003 Target	70%	Annual policy agenda produced	4
FY2003 Actual			
FY2004 Target	75%	Annual policy agenda produced	4
FY2004 Actual			

TARGETED RESULT 5: CBNRM small grant management services to finance special CBNRM opportunities established				
	Overall Impact	Sub-Result 5A: Manual of grant application and management procedures developed	Sub-Result 5B: Clear selection criteria for awards established	Sub-Result 5C: Technical assistance provided to applicants and recipients
Performance Indicator	Percent of successful grants	Number of applications	Number of grants and funds awarded	Effectiveness of field-based technical assistance provided to grantees
Indicator Definition	<ol style="list-style-type: none"> 1. Percent of grants completed. 2. Percent of grants achieving targets. 3. Percent of female beneficiaries. 4. Percent of grants demonstrating positive environmental and socio-economic impact. 5. Percent of grant projects sustained one year after COMPASS grant period. 6. Value of supplemental income generated by grants 	<ol style="list-style-type: none"> 1. Number of expressions of interests received. 2. Number of project proposals received 	<ol style="list-style-type: none"> 1. Number of small grants awarded. 2. Amount of money obligated for grants. 3. Amount of money disbursed. 	<p>Percentage of grantees demonstrating acceptable grant management skills, as defined by the following functions:</p> <ul style="list-style-type: none"> • Meaningful consultation with beneficiaries for decision making, • Adequate financial management mechanisms. • Operational monitor performance system for adaptive management.
Unit of Measurement	<ol style="list-style-type: none"> 1 to 5. Percent 6. U.S. dollars 	Number	<ol style="list-style-type: none"> 1. Number 2. U.S. dollars 3. U.S. dollars 	Percent
Data Source	COMPASS grantees	COMPASS	COMPASS	COMPASS grantees and partners
Method/Approach of Data Collection	Review of records and survey	Review of records	Review of records	Audit
Schedule/Frequency	Annually	Quarterly	Quarterly	Annually
Reporting	Annually	Quarterly	Quarterly	Annually

End-users	USAID, CBNRM coordinating body, grantees, COMPASS partners	USAID	USAID	USAID, CBNRM coordinating body, grantees, COMPASS partners
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TARGETED RESULT	Overall Impact	Sub-Result 5A: Manual of grant application and management procedures developed	Sub-Result 5B: Clear selection criteria for awards established	Sub-Result 5C: Technical assistance provided to applicants and recipients
TR 5: CBNRM small grant management services to finance special CBNRM opportunities established	1. Percent of grants completed. 2. Percent of grants achieving targets. 3. Percent of female beneficiaries. 4. Percent of grants demonstrating positive environmental and socio-economic impact. 5. Percent of grant projects sustained one year after COMPASS grant period. 6. Value of supplemental income generated by grants	1. Number of expressions of interests received 2. Number of project proposals received	1. Number of small grants awarded. 2. Amount of money obligated for grants. 3. Amount of money disbursed.	Percentage of grantees demonstrating acceptable grant management skills, as defined by the following functions: <ul style="list-style-type: none"> • Meaningful consultation with beneficiaries for decision making, • Adequate financial management mechanisms. • Operational monitor performance system for adaptive management.
Target	1. 90% 2. 60% 3. 60% 4. 60% 5. 80% 6. \$250,000	1. 187 EOIs 2. 76 proposals	1. 55 grants 2. \$550,000 3. \$550,000	60%
Baseline Data	1. 0% 2. 0% 3. 0% 4. 0% 5. 0% 6. 0	1. 0 EOIs 2. 0 proposals	1. 0 grants 2. 0 3. 0	0%
FY2000 Target	1. 80% 2. 40% 3. 60%	1. 55 EOIs 2. 22 proposals	1. 15 grants 2. \$180,000 3. \$180,000	40%

	4. 40% 5. 70% 6. \$25,000			
FY2000 Actual				
FY2001 Target	1. 85% 2. 50% 3. 60% 4. 50% 5. 75% 6. \$50,000	1. 127 EOIs 2. 52 proposals	1. 30 grants 2. \$172,500 3. \$352,500	50%
FY2001 Actual				
FY2002 Target	1. 90% 2. 55% 3. 60% 4. 55% 5. 80% 6. \$100,000	1. 187 EOIs 2. 76 proposals	1. 40 grants 2. \$110,000 3. \$462,400	55%
FY2002 Actual				
FY2003 Target	1. 90% 2. 60% 3. 60% 4. 60% 5. 80% 6. \$200,000	1. 187 EOIs 2. 76 proposals	1. 45 grants 2. \$87,500 3. \$550,000	60%
FY2003 Actual				
FY2004 Target	1, 2, 3, 4 - small grants program completed 5, 80% still operating one year after grant 6. \$250,000	1. 187 EOIs 2. 76 proposals	1. 45 grants 2. 0 3. \$550,000	60%
FY2004 Actual				

SECTION II

PERFORMANCE MONITORING FOR CBNRM IN MALAWI

The fundamental approach to managing natural resources in Malawi is undergoing a dramatic shift. Prior to the mid-1990s, the central government controlled natural resources through a strict regime of laws and regulations. Widespread environmental decline attests to the weakness of this command-and-control approach. Under the current democratically elected government, community-based natural resource management is being promoted. With assistance from donors and NGOs, Malawi is making a significant investment to turn CBNRM into a reality. New institutional structures and programs are being set up. Policies promoting decentralization are taking root. Local and national governments are being mobilized in a nationwide planning process for CBNRM. And communities are being trained in more environmentally sound management practices. How well the country adopts CBNRM will have profound implications for the citizens of Malawi and their ability to meet their basic needs well into the future.

The development of a strategic plan and performance monitoring system that allows communities and decision-makers to track their progress in achieving their objectives under CBNRM will be an essential tool in this transition period and beyond. Monitoring permits resource managers and decision-makers to collect data and information to assess whether CBNRM projects and programs are achieving their desired result and impact. Throughout the world, countries are developing performance-monitoring systems for adaptive management. This means that management practices are continually being assessed and modified to enhance the achievement of objectives. Performance monitoring, therefore, is a valuable management tool.

Many different approaches are being adopted for performance monitoring. Each approach has its unique strengths and weaknesses. This section is designed to introduce one possible option that the CBNRM coordinating body¹ within the government of Malawi may consider for monitoring the performance and impacts of CBNRM initiatives in the country. The approach is based on current best practice adopted by countries around the world for monitoring environmental programs, as developed by USAID. It relies on the development of a strategic plan that is depicted in a result framework and identifying indicators to gauge progress against these desired results. The approach is intended to provide a methodology to ensure that all the basic building blocks for CBNRM are monitored systematically.

2.1 Current Environmental Monitoring in Malawi

As a first step to assist in building a performance monitoring system for CBNRM, COMPASS conducted a rapid appraisal of current national-level environmental monitoring activities. This exercise was designed to identify existing monitoring systems upon which a

¹ Following a participatory forum held in Blantyre in November 1999, a proposal was made to the National Council on the Environment (NCE) to create a CBNRM coordinating body. At the NCE's quarterly meeting in December 1999, the proposal was accepted conditional on some minor changes. The revised recommendations will be presented to the NCE at an extraordinary meeting scheduled for early March 2000.

CBNRM performance system could be built. As part of the appraisal, the COMPASS team spoke with government officials in the Departments of Environmental Affairs, Forestry, Parks & Wildlife and Fisheries; various NGO and university representatives; local government officials; and donor agencies involved in CBNRM. Several key findings emerged from the assessment that have far-reaching implications for CBNRM performance monitoring:

- ***Confidence levels regarding the validity of current environmental data is uneven.*** For the Departments of Fisheries, Parks & Wildlife, and forestry, current monitoring relies on district environmental, fisheries, park, and forest specialists to compile and report monitoring data to Lilongwe headquarter offices. In theory, headquarter offices are responsible for compiling the district-level data into a national report. The assessment found that for certain environmental areas, such as fisheries, Malawi has a long and rich tradition of gathering data. The compilation and reporting of this data, however, is generally regarded as more problematic. Indeed, current bottlenecks to environmental monitoring include insufficient funding for field technicians to gather data in their districts, the use of inconsistent methodologies for collecting data that precludes aggregation of the data at the national level, and a lack of a clear use for the data once it is collected and analyzed.
- ***Recent national level data on environmental conditions do not exist.*** For several sectors, comprehensive nationwide environmental assessments exist, but they need to be updated. For example, deforestation rates and forest cover appearing in current environmental literature still refer to a study conducted in 1992 as the most recent source for forestry data. The *1999 Resource Report* by the Fisheries Department contains national data and analysis of fish stocks up to 1996. Nationwide data on fauna dates back to 1994, although the Parks Department does maintain more recent statistics on animal counts and management practices inside its parks and reserves. Furthermore, data do not exist for several important environment areas. According to the *1998 State of the Environment Report*, data for soil erosion, which is commonly ranked as the most serious environmental problem, “is very scanty and the little data [that is] available is inconsistent.” Similarly, a comprehensive baseline assessment of fish stocks in Lake Malawi has yet to be undertaken, despite the fact that the country’s largest waterbody is its primary source of fish and is widely considered to be the most biodiverse freshwater lake in the world with more than 400 endemic species recorded.
- ***Current environmental monitoring conducted by the GOM is highly sectoral in focus,*** targeting individual sub-sectors within the environmental arena, such as fisheries, forests, and wildlife. No evidence exists to indicate that a broader, ecosystems-based approach is being adopted for monitoring that recognizes the inter-relatedness of ecological systems. For example, the Fisheries Department measures fish catch but does not maintain data on whether the habitat of vital nursery grounds are being maintained.

In general, environmental monitoring is regarded as a top-down bureaucratic requirement and as an end in-and-of itself, rather than a tool to help make better decisions. It is reported that district environmental and technical specialists currently collect data as a job requirement, but often do not analyze or use the data to assist in promoting better environmental programs and practices. The dearth of environmental data hampers the ability of decision-makers at all levels to adopt policies and practices that are based on current and reliable information.

Fortunately, several steps are currently underway to begin to address several of these issues. For example, the Environmental Affairs Department (EAD) is now mandated under the 1996 Environmental Management Act to produce an annual state of the environment report for review by Parliament. The *1998 State of the Environment Report* provides a good overview of key environmental issues and trends in the country. Environmental information within individual sections of the current report, however, is often outdated or missing.

In addition, the EAD and its partners have initiated a process to create a national level committee to coordinate CBNRM policy and programs throughout the country. One of the committee's responsibilities will be to monitor and assess the impact of CBNRM. The establishment of the CBNRM coordinating committee to serve as a single focal point for CBNRM monitoring should enhance the prospect for improved environmental monitoring.

The growing recognition of the importance of collecting environmental information for decision making, in combination with the legal mandate to produce the state of the environment report, has resulted in several efforts to bolster environmental monitoring. For example, DANIDA and UNDP are providing technical assistance and equipment to help districts to produce environmental action plans that rely on baseline assessments of key natural resources. As part of the program, plans call for each district to produce their own state of the environment report by the end of 2000, which will be compiled into the national level report each year. It is unclear, however, whether common national indicators will be employed to facilitate the collection and aggregation of data. The Department of Forestry recently obtained a NOAA satellite feed to receive land and cloud cover information. In addition, more attention is expected to be focussed on environmental monitoring once the CBNRM coordinating committee is established. Furthermore, COMPASS is prepared to offer technical assistance as needed for CBNRM performance monitoring.

As additional attention is directed toward performance monitoring for CBNRM, several issues will need to be addressed to ensure that a monitoring system actually can translate into better environmental practices:

- A CBNRM monitoring plan will need to recognize that natural resource management requires a broader, ecosystem perspective that considers not only bio-physical parameters, but also areas such as improvements in key enabling conditions for CBNRM and the adoption of CBNRM practices. Such areas would require measuring indicators for social and economic welfare, policy reform, financing, and other management information, which have yet to be integrated into current monitoring practice.
- The current policy of decentralization places greater emphasis on forging new partnerships with districts, traditional authorities, community organizations, and non-governmental organizations, which have little experience in collecting or using environmental information for decision making. Training these partners in performance monitoring for adaptive management will be required.
- Current CBNRM projects are not following any common or objective methodology for performance monitoring. The lack of a consistent or common approach for monitoring creates difficulties in assessing which CBNRM activities are the most successful and should be considered for replication. Any future CBNRM monitoring system should consider the adoption of a core set of common indicators that can be aggregated nationwide so that the development and environment community can identify more

systematically what is working and what is not working in CBNRM. This knowledge will assist in targeting future programs and policies.

- With over 25% of Malawi's territory covered by water, a CBNRM performance-monitoring plan should consider using the watershed as the basic management unit for monitoring. Greater focus on a watershed-level monitoring plan would reflect recognition of natural boundaries and the strong interrelationships between terrestrial and aquatic ecosystems. Monitoring at a watershed level could also feed into an integrated system to improve coordination of current programs. In the case of Malawi, a watershed approach may require transboundary cooperation.

2.2 Developing a Monitoring System for CBNRM

As the EAD and its partners move forward with promoting CBNRM, several options are available for developing a monitoring system for CBNRM activities and policies. This section presents illustrative results framework and a preliminary list of indicators that are designed to demonstrate the types of parameters that could be measured for CBNRM monitoring. The results framework and indicators are by no means final. This section is not intended to be a step-by-step guide for developing a performance-monitoring plan for CBNRM. Instead, it is designed to provide a starting point for discussing how a CBNRM strategy and monitoring system could be structured and the types of information that could be monitored. It stresses several elements: the need for a standard methodology and system to measure the different levels of performance and impacts, the use of a common list of indicators and data collection methodologies to assist in aggregation, and the need to keep environmental monitoring as simple as possible. Fundamental to the success of any monitoring plan is that it should be practical, useful, and participatory. Fortunately, several sectors in Malawi already have a long tradition of collecting environmental data. This history should greatly enhance CBNRM performance monitoring.

2.3 Illustrative Result Framework for CBNRM in Malawi

A first step for establishing a CBNRM monitoring plan is to develop a results framework to guide the selection of the most useful indicators that can logically link performance data together to measure progress within a strategy. The illustrative result framework in Figure 2 attempts to synthesize current CBNRM work and approaches in Malawi into one comprehensive framework that can be used as the building blocks for a CBNRM strategic plan, as well as for a performance monitoring plan. The result framework, which was developed in consultation with several Malawian CBNRM experts, presents a conceptual framework that neatly links programmatic results and environmental and socio-economic impacts.

This result framework is based on a hierarchy of results or "impact levels". At the base of the framework stands three mutually supportive "targeted results," or TRs, which are required to create a positive "enabling environment" for CBNRM. CBNRM objectives are divided into three higher level TRs:

- TR 1 – National framework for CBNRM established,

- TR 2 – Community mobilization for CBNRM increased, and
- TR 3 – Sustainable financing for CBNRM secured.

These TRs are the results that need to be pursued concurrently in the medium-term, from approximately three to five years, in order to build the enabling environment required for CBNRM to take hold in Malawi (impact level III). It is important to note that the TRs capture the results to be pursued, that is, the objectives that will be achieved within a pre-determined time period. Each TR is in turn supported by lower-level “intermediate results” (IRs). These lower-level IRs are pursued within an even shorter-term time horizon, from one to two years. To operationalize this strategy, activities must be specially tailored to support each lower level IR. These activities may include a combination of training, technical assistance, procurement of equipment, applied research, credit or small grant programs, etc.

Under this hierarchy, the assumption is that once a positive enabling environment has been created – through the combination of the right national framework for CBNRM, mobilization of local communities, and creation of sustainable financing mechanisms – the expected result will be that resource users will adopt improved natural resource management practices (impact level II). These practices may include sustainable forest management practices, improved soil conservation techniques for farming, or less destructive fishing practices. As resource users improve their management practices, the impact should be that key environmental threats are reduced: high deforestation rates will decrease; fishing effort will reach more sustainable levels; and wildlife poaching will decline. The culmination of improved resource management practices and reduced environmental threats should be that ecosystem functions are, at minimum, maintained and preferably improved for sustainable development (impact level I). This improvement may mean that forest cover will remain stable and perhaps increase, soil erosion will decrease, or depleted fish stocks will recover. In short, the basic integrity and equilibrium of vital ecosystem services will be revived for sustainable development.

Under the framework, it is important to note that while the impacts of poor environmental management can be immediately apparent, it can take many years for the impacts of improved resource management practices to be measurable. Considerable time lags can separate improvements in natural resource management and the resulting biophysical changes. For instance, the adoption of agroforestry practices will only show measurable effects on soil fertility or biomass in several years. Recovery of certain populations of wildlife may take several generations.

2.4 Illustrative Indicators for CBNRM Monitoring

Once a result framework has been developed, the selection of indicators can follow a straightforward and systematic approach. In association with the illustrative result framework presented above, table 2 provides a list of illustrative indicators that the CBNRM coordinating committee may consider for national CBNRM monitoring. The list of illustrative indicators are categorized hierarchically according the result framework, with each indicator tailored to measure the performance of achieving a particular result within the CBNRM strategy. Thus, progress in achieving the CBNRM strategy can be assessed using a consistent, timely, and systematically approach through the comprehensive performance monitoring plan. Should performance for a particular indicator show that a target is not

Impact Level I - Biophysical and Socioeconomic Improvements

Impact Level II - Adoption of Improved Natural Resource Management Practices

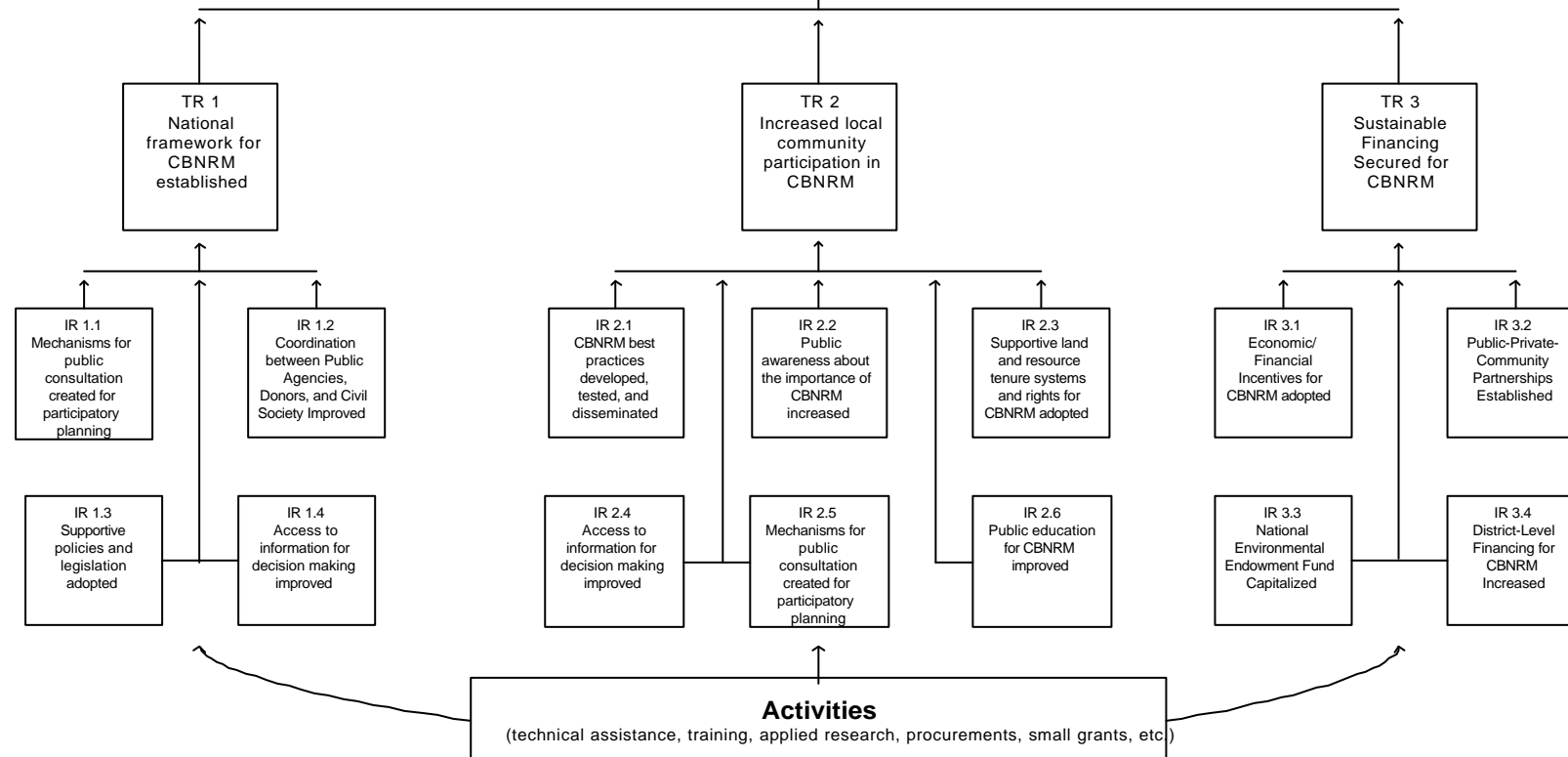
Impact Level III - Establishment of a Favorable Enabling Environment for CBNRM

CBNRM GOAL
Ecosystem Functions Maintained and/or Improved for Sustainable Development

OBJECTIVE
CBNRM Practices Adopted throughout Malawi

Figure 2
Illustrative CBNRM Results Framework for Malawi

Critical Assumptions
1. Macro-economic conditions stabilize or improve
2. Climatic conditions remain stable
3. Government and International support for CBNRM is maintained



being achieved, program managers can identify corrective actions early within strategy implementation. This is the essence of adaptive management.

In designing these illustrative indicators, seven common criteria were kept in mind. Indicators were developed to be:

- Measurable – can be recorded and analyzed in quantitative or qualitative terms.
- Precise – are defined the same way by everyone.
- Relevant – provides information required for decision making.
- Readily understandable – can be clearly interpreted by intended users of the data.
- Consistent – always measuring the same thing.
- Sensitive – measures can be adjusted to changes in conditions.
- Direct – measures designed to track as closely as possible the progress of particular result.

Simple indicators may well be more cost effective as well as meaningful. Simplicity and a standardized methodology for data collection will ensure that monitoring conducted at different sites or times or by different investigators can be compared with a high level of confidence.

Table 2. Illustrative Indicators for Malawi CBNRM Performance Monitoring Plan

CBNRM Goal	
Ecosystem Functions Maintained and/or Improved for Sustainable Development	
Objective/Result Statement	Illustrative Indicator(s)
Biophysical Indicators	
Forest Cover Maintained and/or Increased	Hectares of forest cover (natural, plantation, reforested/afforested) Rate of deforestation in forest reserves and estates.
Rate of Soil Erosion Reduced	Sediment yield in major rivers Rates of soil erosion (tones/ha/yr) in key sites
Fish Catch Maintained at Sustainable Levels	Commercial and subsistence fish-catch: <ul style="list-style-type: none"> • Catch per unit effort per species
Biological Diversity Conserved	Population of key species found throughout Malawi: <ul style="list-style-type: none"> • Elephants, Buffaloes, Hippos, Impalas, Crocodiles; • Indicator species to provide an overall indication of ecosystem health • Aquatic biodiversity in Lake Malawi - Species number and size
Water Quality and Quantity Improved	Water quality of key waterbodies Water efficiency in agriculture Height of water table

Socio-Economic Indicators	
Rural Incomes Increased	Average household income in communities with effective CBNRM practices
Improved Water Resources Management	Percent of population with access to potable water Percent of population with access to sanitation
Increased Availability of Energy	Amount of time required to gather firewood Price of firewood Use of alternative energy

Objective CBNRM Practices Adopted throughout Malawi	
Objective/Result Statement	Illustrative Indicator(s)
CBNRM Practices Adopted throughout Malawi	Number, percent of communities effectively adopting CBNRM practices Hectares under effective CBNRM Hectares under effective protection for biodiversity conservation and sustainable forest management

Targeted Result 1 National framework for CBNRM established	
Objective/Result Statement	Illustrative Indicator(s)
Targeted Result 1 – National framework for CBNRM established	To be determined
IR 1.1 - Mechanisms for public consultation created for participatory planning	Number of NGOs able to effectively participate in policy advocacy process
IR 1.2 - Coordination between public agencies, donors, and civil society improved	To be determined
IR 1.3 – Supportive policies and legislation adopted	Success rate for passage of key CBNRM reforms as articulated by the CBNRM Task Force achieved
IR 1.4 -Access to information for decision making improved	Production of annual state of the environment report

Targeted Result 2	
Increased Local Community Participation in CBNRM	
Objective/Result Statement	Illustrative Indicator(s)
Targeted Result 2 – Increased local community participation in CBNRM	Number of districts with CBNRM components in environmental action plans Number of districts achieving CBNRM targets within their environmental action plans Number of communities adopting CBNRM in local development plans
IR 2.1 - CBNRM best practices developed, tested, and disseminated	Number of CBNRM best practices developed, tested, and disseminated in key environmental sectors
IR 2.2 - Public awareness about the importance of CBNRM increased	Percent of Malawians who can name environmental problems and solutions
IR 2.3 - Resource users granted legal stewardship over resources	To be determined
IR 2.4 - Access to information for decision making improved	Number of districts producing annual state of the environment reports
IR 2.5 - Mechanisms for public consultation created for participatory planning	Percent of communities with functional Village Natural Resource Committees
IR 2.6 – Public education for CBNRM improved	Number of schools with environmental curricula Number of EDOs, technical specialists, and government extension workers demonstrating proficiency in CBNRM best practices, concepts and approaches
Targeted Result 3	
Sustainable CBNRM Financing Secured	
Objective/Result Statement	Illustrative Indicator(s)
Targeted Result 3 - Sustainable CBNRM Financing Secured	Amount of money secured for CBNRM
IR 3.1 - Public-Sector Economic Incentives for CBNRM adopted	Key policy reforms (i.e., cost recovery for water, removal of subsidies) implemented Market access for CBNRM products improved (certification)
IR 3.2 - Public-Private - Community Sector Partnerships Established	Amount of funding generated by CBNRM activities (ecotourism, agroforestry, sustainable fisheries, etc.) Percent of park gate receipts channeled to communities.
IR 3.3 - National Environmental Endowment Fund Capitalized	Funds disbursed from endowment fund for CBNRM Amount secured for national environmental endowment fund capitalization

2.5 Next Steps

The illustrative result framework and indicators are examples of how a CBNRM performance-monitoring plan for Malawi could be structured. It is important to keep in mind that performance monitoring is designed to promote adaptive management and informed decision making by emphasizing the systematic tracking and analysis of performance, and the subsequent modification of work plans and objectives. Ultimately, a CBNRM monitoring plan for Malawi needs to respond to two fundamental issues: how well CBNRM is being adopted by communities, and whether CBNRM is having a positive impact on environmental quality and socioeconomic development. When performance monitoring is tied to CBNRM program objectives, monitoring will enhance program successes by allowing managers to make better decisions. Iteration will often be the key to the entire management cycle. CBNRM activities may be repeatedly modified as new information becomes available about the effectiveness of management actions.

The performance-monitoring plan itself is not exempt from this process. Once the monitoring plan has been designed, it needs to be tested, revised in response to the test results, and revised again. As resource managers learn which types of information are useful and cost effective and which are not, the monitoring plan can be modified. New information-needs will also continue to arise, while some types of information previously collected may become less relevant. Furthermore, monitoring is of no use unless the results of the monitoring efforts help to revise and improve community management as well as the overall program being monitored.

As the Government of Malawi, communities, NGOs, donors, and their partners move forward with CBNRM, several possible options exist for developing a cost-effective, practical, and useful performance-monitoring plan:

1. Given the dearth of environmental data for Malawi and the difficulties this presents for basic environmental planning, donors and the government should consider developing an action plan that selectively targets key environmental parameters as priorities for monitoring. The year 2000 and the launching of CBNRM initiatives throughout the country offer a logical and convenient point for collecting new data for such parameters as forest cover, soil erosion, water quality, fisheries stocks, and national wildlife populations.
2. Little awareness exists among Malawians at all levels of decision making about current adaptive management and performance monitoring approaches and uses for environmental planning and management. Performance monitoring training and “learning by doing” exercises of CBNRM partners could begin to create new awareness and skills that could greatly enhance the achievement of CBNRM objectives in the country.
3. Malawian CBNRM stakeholders and decision-makers need to develop a consensus on a strategic plan and a performance monitoring plan for CBNRM. This consensus needs to be forged using participatory approaches that ensures a strong sense of ownership over results to be pursued and indicators to be monitored.

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LIST OF PEOPLE INTERVIEWED

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